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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,526	07/07/2003	Arun M. Hamasagar	02-599	6107
719	7590	03/21/2006	EXAMINER	
CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT. PEORIA, IL 616296490			AURORA, REENA	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/614,526	HAMASAGAR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Reena Aurora	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 17 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 17 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This communication is in response to amendment received on 12/27/05.

The applicant has canceled claims 18 – 23.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blubaugh et al. (6,509,733) in view of Munch et al. (5,210,490).

As to claims 1, 10 and 24, Blubaugh et al. (hereinafter Blubaugh) discloses a fluid cylinder including a first sensor housing member (32, fig. 2) having a first sensor conduit (34, fig. 1 and 2) therein; a second sensor housing member (40, fig. 1 and 2) slidably received within the first sensor housing member (32) and having a second sensor conduit therein; a first sensor portion (38) connected with the first sensor housing member; and a second sensor portion (44) connected with the second sensor housing member (40); wherein: the first sensor housing member (32) is configured and arranged to at partially enclose the first sensor portion (38) and the second sensor portion (44); and the position sensor assembly is operable to register a position of the first sensor

portion (38) relative to the second sensor portion (44) as a result of cooperation between the first and second sensor portions (col. 3, lines 40 - 64) Blubaugh fails to show the sensor housing adapted for external connection to the linkage system. Munch et al. (hereinafter Munch) discloses a linear position sensor wherein the sensor housing (10, 20) is externally connected to the linkage system (13, fig. 1). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Blubaugh with the teachings of Munch such that externally connecting the sensor housing to the linkage system, resulting in enhancing the durability of the assembly along with the superior temperature stability of the sensing circuit (col. 27, line 5 - 20).

As to claims 2 and 11, Blubaugh discloses the second sensor housing member (40) is telescopically received within the first sensor housing member (col. 3, lines 45 - 48).

As to claims 3 and 12, Blubaugh discloses the first and second sensor housing members comprise first and second tubes, respectively, the second tube (40, fig. 1 and 2) being telescopically received within the first tube (32).

As to claims 4 and 13, Blubaugh discloses that the first and second tubes (32, 30) have generally circular cross sectional shapes (Note fig. 1).

As to claims 5, 14 and 15, Blubaugh discloses the first sensor portion (40) is disposed generally parallel to or coaxially with the sensor conduit and is configured and arranged to be movable within the second sensor conduit (32) during operation of the position sensor assembly.

As to claims 6 - 9 and 16, 17, Blubaugh discloses that the first sensor portion is arranged in a telescopically movable configuration relative to the second sensor portion (col. 3, lines 46 - 48).

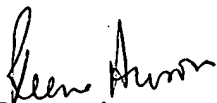
***Response to Arguments***

Applicant's arguments with respect to claims 1 – 17 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Reena Aurora